- -- 110. An isolated receptor recognition factor (RRF) encoded by a recombinant DNA, wherein the recombinant DNA molecule hybridizes under standard hybridization conditions of 5X SSC and 65°C to a nucleic acid complementary to the nucleotide sequence of SEQ ID NO:11; wherein said RRF comprises a tyrosyl residue that is phosphorylated when said polypeptide is expressed in a cell treated with IL-6; wherein when said cell expresses a protein having the amino acid sequence of SEQ ID NO:12 said protein is phosphorylated in response to IL-6 treatment.
- 111. An immunogenic fragment of an isolated receptor recognition factor (RRF), Stat3, having the amino acid sequence of SEQ ID NO:12.
- 112. A fusion protein comprising the immunogenic fragment of Claim 111.
- 113. The fusion protein of Claim 112 which further comprises GST.
- 114. An isolated fragment of a recognition factor (RRF) comprising 40 amino acids of SEQ ID NO:12.
- 115. The isolated fragment of Claim 114 wherein the 40 amino acids of SEQ ID NO:12 are amino acids 688 to 727.
- 116. A fusion protein comprising the isolated fragment of Claim 115.
- 117. The fusion protein of Claim 116 which further comprises GST.
- 118. A fusion protein comprising the isolated fragment of Claim 114.
- 119. The fusion protein of Claim 118 which further comprises GST. --

## **REMARKS**

Reconsideration of this application is respectfully requested. The Specification has been amended to correct an obvious typographical error. Claim 1 has been amended and